GRF Errors Corrocted by the STIC Systems Branch CRF Procossing Daio: Edited by: Sorbil Number: Vorthod by: Z Changed the margins in cases where the sequence text was "wrapped" down to the next line. Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other ______ Added the mandatory heading and subheadings for *Current Application Data*. Edited the Number of Sequences field. The applicant spelled out a number instead of using an integer. Changed the spelling of a mandatory field (the headings or subheadings), specifically: Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: Inserted or corrected a nucleic number at the end of a nucleic line. SEO ID NO's edited: Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included:+, . Deleted extra, invalid, headings used by an applicant, specifically: Deleted: non-ASCII 'garbage' at the beginning/end of files: secretary initials/filename at end of file; page numbers throughout text; other invalid text, such as Inserted mandatory headings, specifically: __ Corrected an obvious error in the response, specifically: Edited identifiers where upper case is used but lower case is required, or vice versa. Corrected an orror in the Number of Sequences field, specifically: A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted. Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a Patentin bug). Sequences corrected: ____ Other: Examiner: The above corrections must be communicated to the applicant in the first Office

Action. DO NOT send a copy of this form.

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| 104 Gly Phe Pro Gly Phe Arg Val Gly Ile Ile Tyr Ser Tyr Asn Asp Ala 295 107 gtg gtt aat tgt gca cgc aaa atg tca agc ttt gga ttg gtg tca aca 1026 108 Val Val Asn Cys Ala Arg Lys Met Ser Ser Phe Gly Leu Val Ser Thr 109 300 305 305 310 111 cag act cag tat ctt tta gca tcg atg cta aat gat gag ttt gtg 1074 112 Gln Thr Gln Tyr Leu Leu Ala Ser Met Leu Asn Asp Asp Glu Phe Val 113 315 320 325 325 325 115 gag agg ttt ctg gca gag agt gca aag agg ttg gct caa agg ttc agg 1122 116 Glu Arg Phe Leu Ala Glu Ser Ala Lys Arg Leu Ala Gln Arg Phe Arg 117 330 335 335 340 345 340 345 119 gtt ttc act ggg ggg ttg gcc aaa gtt ggc ata aag tgc ttg caa agc 1170 120 Val Phe Thr Gly Gly Leu Ala Lys Val Gly Ile Lys Cys Leu Gln Ser 121 350 365 365 370 375 375 127 cca act ttc gac tct gaa acg gag ctt tgg atg gad ttg aaa gtt atc atc gaa acg act ttg aaa gtt atc atc gaa acg act ttg aaa gtt atc atc gaa acg act ttg aaa gtt atc act gaa acg act | 101 | | | | | 270 |) | • | | | 275 | 5 | | | | 280 |) | |
| 105 | 103 | ggg | , tto | c cct | ggc | ttc | aga | gto | ggd | c ato | : ata | ı tac | tct: | tac | : aat | : gat | gct | 978 |
| 107 gtg gtt aat tgt gca cgc aaa atg tca agc ttt gga ttg gtg tca aca 1026 108 Val Val Asn Cys Ala Arg Lys Met Ser Ser Phe Gly Leu Val Ser Thr 109 | 104 | Gly | / Phe | Pro | o Gly | , Phe | Arg | Val | Gly | y Il∈ | : Ile | туг | : Sei | Tyr | Asn | Asp | Ala | |
| 108 Val Val Asn Cys Ala Arg Lys Met Ser Phe Gly Leu Val Ser Thr 109 300 300 305 305 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 310 311 312 325 325 325 325 325 312 325 345 312 345 312 312 345 312 345 < | 105 | 5 | | | 285 | 5 | | | | 290 |) | | | | 295 | 5 | | |
| 109 300 305 305 310 111 cag act cag tat ctt tta gca tcg atg cta aat gat gat gag ttt gtg 1074 112 Gln Thr Gln Tyr Leu Leu Ala Ser Met Leu Asn Asp Asp Glu Phe Val 113 315 320 325 115 gag agg ttt ctg gca gag agt gca aag agg ttg gct caa agg ttc agg 1122 116 Glu Arg Phe Leu Ala Glu Ser Ala Lys Arg Leu Ala Gln Arg Phe Arg 117 330 335 335 345 119 gtt ttc act ggg ggg ttg gcc aaa gtt ggc ata aag tgc ttg caa agc 1170 120 Val Phe Thr Gly Gly Leu Ala Lys Val Gly Ile Lys Cys Leu Gln Ser 121 350 350 355 360 123 aat gct ggt cta ttt gtg tgg atg gat tta agg caa ctt ctc aaa aag 1218 124 Asn Ala Gly Leu Phe Val Trp Met Asp Leu Arg Gln Leu Leu Lys Lys 125 365 365 370 370 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt atc att cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | 107 | gto | gtt | aat | t tġt | gca | cgc | aaa | ato | g tca | ago | ttt | gga | a ttg | gtg | r tca | aca | 1026 |
| 109 300 305 305 310 111 cag act cag tat ctt tta gca tcg atg cta aat gat gat gag ttt gtg 1074 112 Gln Thr Gln Tyr Leu Leu Ala Ser Met Leu Asn Asp Asp Glu Phe Val 113 315 320 325 115 gag agg ttt ctg gca gag agt gca aag agg ttg gct caa agg ttc agg 1122 116 Glu Arg Phe Leu Ala Glu Ser Ala Lys Arg Leu Ala Gln Arg Phe Arg 117 330 335 335 345 119 gtt ttc act ggg ggg ttg gcc aaa gtt ggc ata aag tgc ttg caa agc 1170 120 Val Phe Thr Gly Gly Leu Ala Lys Val Gly Ile Lys Cys Leu Gln Ser 121 350 350 355 360 123 aat gct ggt cta ttt gtg tgg atg gat tta agg caa ctt ctc aaa aag 1218 124 Asn Ala Gly Leu Phe Val Trp Met Asp Leu Arg Gln Leu Leu Lys Lys 125 365 365 370 370 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt atc att cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | _ | | _ | _ | - | | _ | - | - | | | | | | | |
| 112 Gln Thr Gln Tyr Leu Leu Ala Ser Met Leu Asn Asp Asp Glu Phe Val 113 | | | | | | | | _ | | | | | | | | | | |
| 112 Gln Thr Gln Tyr Leu Leu Ala Ser Met Leu Asn Asp Asp Glu Phe Val 113 | 111 | cac | r act | cac | r tat | ctt | tta | qca | tco | r ato | r cta | ı aat | gat | gat | gad | r ttt | gtg | 1074 |
| 113 | | | | | | | | | | | | | | | | | | |
| 115 gag agg ttt ctg gca gag agt gca aag agg ttg gct caa agg ttc agg 1122 116 Glu Arg Phe Leu Ala Glu Ser Ala Lys Arg Leu Ala Gln Arg Phe Arg 117 330 335 345 119 gtt ttc act ggg ggg ttg gcc aaa gtt ggc ata aag tgc ttg caa agc 1170 120 Val Phe Thr Gly Gly Leu Ala Lys Val Gly Ile Lys Cys Leu Gln Ser 121 350 355 360 123 aat gct ggt cta ttt gtg tgg atg gat tta agg caa ctt ctc aaa aag 1218 124 Asn Ala Gly Leu Phe Val Trp Met Asp Leu Arg Gln Leu Leu Lys Lys 125 365 370 375 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt atc att cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | | | 1 | | | | | | | | | | | | | |
| 116 Glu Arg Phe Leu Ala Glu Ser Ala Lys Arg Leu Ala Gln Arg Phe Arg 117 330 335 340 345 119 gtt ttc act ggg ggg ttg gcc aaa gtt ggc ata aag tgc ttg caa agc 1170 120 Val Phe Thr Gly Gly Leu Ala Lys Val Gly Ile Lys Cys Leu Gln Ser 121 350 355 360 123 aat gct ggt cta ttt gtg tgg atg gat tta agg caa ctt ctc aaa aag 1218 124 Asn Ala Gly Leu Phe Val Trp Met Asp Leu Arg Gln Leu Leu Lys Lys 125 365 370 375 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt atc att cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | | | cto | ı aca | σασ | | | a aac | raσσ | r t.t.d | | | aσσ | rtto | agg | 1122 |
| 117 330 335 345 346 345 119 gtt ttc act ggg ggg ttg gcc aaa gtt ggc ata aag tgc ttg caa agc 1170 120 Val Phe Thr Gly Gly Leu Ala Lys Val Gly Ile Lys Cys Leu Gln Ser 121 350 355 360 123 aat gct ggt cta ttt gtg tgg atg gat tta agg caa ctt ctc aaa aag 1218 124 Asn Ala Gly Leu Phe Val Trp Met Asp Leu Arg Gln Leu Leu Lys Lys 125 365 365 370 375 375 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt atc att cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | | | | | | | | | | | | | | | | |
| 119 gtt ttc act ggg ggg ttg gcc aaa gtt ggc ata aag tgc ttg caa agc 1170 120 Val Phe Thr Gly Gly Leu Ala Lys Val Gly Ile Lys Cys Leu Gln Ser 121 | | | | , 1110 | z nec | 4 ALG | | | . Alc | LLYC | , mr | | | . 011. | | , - 110 | | |
| 120 Val Phe Thr Gly Gly Leu Ala Lys Val Gly Ile Lys Cys Leu Gln Ser 121 | | | | | - ~~ | | | | | · ~++ | | | | , tac | ++0 | | | 1170 |
| 121 | | | | | | | | | | | | | | | | | | 1170 |
| 123 aat gct ggt cta ttt gtg tgg atg gat tta agg caa ctt ctc aaa aag 1218 124 Asn Ala Gly Leu Phe Val Trp Met Asp Leu Arg Gln Leu Leu Lys Lys 125 365 370 375 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt atc att cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | L PIIE | = 1111 | r GT | _ | | MIC | LLys | s vai | | | : Dya | s Cys | , пес | | | |
| 124 Asn Ala Gly Leu Phe Val Trp Met Asp Leu Arg Gln Leu Leu Lys Lys 125 365 370 375 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt at cat gat at cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | | | | | | | | | | | | | | | | 1010 |
| 125 365 370 375 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt atc att cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile His Glu 12 Ile His Glu 129 380 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro 1375 | | | | | | | | | | | | | | | | | | 1210 |
| 127 cca act ttc gac tct gaa acg gag ctt tgg aaa gtt atc att cat gaa 1266 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | n Ala | a GTZ | | | val | Trp | мет | | | ı Arg | J GII | ı Leu | | | з гла | |
| 128 Pro Thr Phe Asp Ser Glu Thr Glu Leu Trp Lys Val Ile Ile His Glu 129 380 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | | | | | | | | | | | | | | | | 2000 |
| 129 380 385 390 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | | | | | | | | | | | | | | | | 1366 |
| 131 gtt aag atc aat gtt tca cct ggc tat tcc ttc cat tgc act gag cca 1314 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | Th: | | _ | Ser | Glu | Thr | | | Trp | ь Гля | va] | | | His | GLu | |
| 132 Val Lys Ile Asn Val Ser Pro Gly Tyr Ser Phe His Cys Thr Glu Pro | | | | | | | | | | | | | • | | | | | |
| | | | | | | | | | | | | | | | | | | 1314 |
| 133 395 400 405 | | | L Lys | s Ile | e Asr | ı Val | . Ser | | _ | y Tyr | Ser | Phe | | _ | Thi | Glu | ı Pro | |
| | 133 | 3 | 395 | 5 | | | | 400 |) | | | | 405 | 5 | | • | | |

Input Set : A:\Pto.amc

| 125 | | | | | | | | | | | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------|-------|
| | | | | | | | | | | | | | | | gtg | | 1362 |
| 136 | Gly | Trp | Phe | Arg | Val | Cys | Tyr | Ala | Asn | Met | Asp | Asp | Met | Ala | Val | Gln | |
| 137 | 410 | | | | | 415 | | | | | 420 | | | | | 425 | |
| 139 | att | qct | ttq | caa | cqa | atc | cqc | aac | ttt | gtg | ctt | caa | aac | aag | gag | gtc | 1410 |
| | | | | | | | | | | | | | | | Glu | | |
| 141 | | | | - | 430 | | | | | 435 | | | | - | 440 | | |
| | ata | ata | tct | aat | | aaa | cat | tat | taa | cac | agt | aac | t.t.a | agg | ctg | aσc | 1458 |
| | | | | | | | | | | | | | | | Leu | | |
| 145 | Val | vai | oci | 445 | цуз | בינם | 1115 | 0,5 | 450 | | OCI | 21011 | Lou | 455 | 200 | 001 | |
| | a+ a | | 200 | | 244 | +++ | ant. | ~~+ | | 200 | 2+4 | + ~ > | aa+ | | tct | CCC | 1506 |
| | | | | | | | | | | | | | | | | | 1,500 |
| | Leu | гàг | | Arg | Arg | Pne | Asp | | TTE | THI | мес | ser | | птъ | Ser | PIO | |
| 149 | | | 460 | | | | | 465 | | | | | 470 | | | | 1.550 |
| | | | | | | | | | | | | tgag | gtttg | jca ' | tatto | cctctg | 1559 |
| | Leu | Pro | Gln | Ser | Pro | Met | | Lys | Ala | Thr | Asn | | | | | | |
| 153 | | 475 | | | | | 480 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | catttt | |
| 157 | gaga | aaggt | cac a | ataag | gtgct | ig ga | attt | jttct | ttg | ggaad | cagc | aata | aacag | gga i | aatto | cctgat | 1679 |
| | | | | | | | | | | | | | | | | gcacgc | |
| 161 | ccct | ttcaa | atc t | ttagg | gggca | at tt | tttt | ctttt | tto | cactt | cacc | aaag | ggtto | caa | ggtga | aaaaa | 1799 |
| 163 | gtti | tatag | gag t | tctgt | aat | gt ta | attg | gttta | a tca | agaag | gagt | ccaa | aaaga | atg ' | tctgt | caatct | 1859 |
| 165 | gcta | actga | iaa t | ttgta | acti | t ca | aatta | atgaa | a taa | aatt | gtta | ataa | aaggt | ct | tcaaa | attcat | 1919 |
| | ttc | | | _ | | | | _ | | | | | | | | | 1923 |
| | | 0> SI | EO II | ONO: | : 2 | | | | | | | | | | | | |
| | | 1> LE | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | <pre>< <212> TYPE: PRT </pre> <pre>< <213> ORGANISM: Plant</pre> | | | | | | | | | | | | | | | | |
| | <21 | 3> OF | CAN. | | Plar | n+ | | | | | | | | | | | |
| 173 | | | | ISM: | | nt | | | | | | | | | | | |
| 173 175 | <400 | 0> SI | EQUE | ISM: NCE: | 2 | | Asn | Gln | Thr | Pro | Len | Len | Ser | Lvs | Met | Ala | |
| 173 175 176 | <400 Met | 0> SI | EQUE | ISM: NCE: | 2 | | Asp | Gln | Thr | | Leu | Leu | Ser | Lys | Met | Ala | |
| 173 175 176 177 | <400 Met | 0> SI Gly | EQUE! Phe | ISM: NCE: Lys | 2 Ala 5 | Met | | | | 10 | | | | | 15 | | |
| 173 175 176 177 179 | <400 Met | 0> SI Gly | EQUE! Phe | ISM: NCE: Lys Gly | 2 Ala 5 | Met | | | Ser | 10 | | | | Gly | | | |
| 173 175 176 177 179 181 | <400 Met 1 Ile | 0> SI Gly Gly | EQUEI Phe Asp | ISM: NCE: Lys Gly 20 | 2 Ala 5 His | Met Gly | Glu | Ser | Ser 25 | 10 Pro | Tyr | Phe | Asp | Gly 30 | 15 Trp | Lys | |
| 173 175 176 177 179 181 183 | <400 Met 1 Ile | 0> SI Gly Gly | EQUEI Phe Asp Asp | ISM: NCE: Lys Gly 20 | 2 Ala 5 His | Met Gly | Glu | Ser His | Ser 25 | 10 Pro | Tyr | Phe | Asp Pro | Gly 30 | 15 | Lys | |
| 173 175 176 177 179 181 183 185 | <400 Met 1 Ile Ala | 0> SI Gly Gly Tyr | Phe Asp Asp 35 | ISM: NCE: Lys Gly 20 Gln | 2 Ala 5 His Asn | Met Gly Pro | Glu Phe | Ser His 40 | Ser 25 Pro | 10 Pro Thr | Tyr Asp | Phe Asn | Asp Pro 45 | Gly 30 Asn | 15 Trp Gly | Lys Val | |
| 173 175 176 177 179 181 183 185 | <400 Met 1 Ile Ala | 0> SI Gly Gly Tyr | Phe Asp Asp 35 | ISM: NCE: Lys Gly 20 Gln | 2 Ala 5 His Asn | Met Gly Pro | Glu Phe Glu | Ser His 40 | Ser 25 Pro | 10 Pro Thr | Tyr Asp | Phe Asn Ser | Asp Pro 45 | Gly 30 Asn | 15 Trp | Lys Val | |
| 173 175 176 177 179 181 183 185 187 | <400 Met 1 Ile Ala Met | O> SE Gly Gly Tyr Gln 50 | Phe Asp Asp 35 Met | ISM: NCE: Lys Gly 20 Gln Gly | 2 Ala 5 His Asn | Met Gly Pro Ala | Glu Phe Glu 55 | Ser His 40 Asn | Ser 25 Pro Gln | 10 Pro Thr Leu | Tyr Asp Thr | Phe Asn Ser 60 | Asp Pro 45 Asp | Gly 30 Asn Leu | 15 Trp Gly Val | Lys Val Glu | |
| 173 175 176 177 179 181 183 185 187 189 | <400 Met 1 Ile Ala Met Asp | O> SE Gly Gly Tyr Gln 50 | Phe Asp Asp 35 Met | ISM: NCE: Lys Gly 20 Gln Gly | 2 Ala 5 His Asn | Met Gly Pro Ala Asn | Glu Phe Glu 55 | Ser His 40 Asn | Ser 25 Pro Gln | 10 Pro Thr Leu | Tyr Asp Thr | Phe Asn Ser 60 | Asp Pro 45 Asp | Gly 30 Asn Leu | 15 Trp Gly | Lys Val Glu | |
| 173 175 176 177 179 181 183 185 187 189 191 | <400 Met 1 Ile Ala Met Asp 65 | 0> SI Gly Gly Tyr Gln 50 Trp | Phe Asp Asp 35 Met | ISM: NCE: Lys Gly 20 Gln Gly Leu | 2 Ala 5 His Asn Leu Asn | Met Gly Pro Ala Asn 70 | Glu Phe Glu 55 Pro | Ser His 40 Asn Glu | Ser 25 Pro Gln Ala | 10 Pro Thr Leu Ser | Tyr Asp Thr Ile 75 | Phe Asn Ser 60 Cys | Asp Pro 45 Asp Thr | Gly 30 Asn Leu Pro | 15 Trp Gly Val Glu | Lys Val Glu Gly 80 | |
| 173 175 176 177 179 181 183 185 187 189 191 193 195 | <400 Met 1 Ile Ala Met Asp 65 | 0> SI Gly Gly Tyr Gln 50 Trp | Phe Asp Asp 35 Met | ISM: NCE: Lys Gly 20 Gln Gly Leu | 2 Ala 5 His Asn Leu Asn Arg | Met Gly Pro Ala Asn 70 | Glu Phe Glu 55 Pro | Ser His 40 Asn Glu | Ser 25 Pro Gln Ala | 10 Pro Thr Leu Ser | Tyr Asp Thr Ile 75 | Phe Asn Ser 60 Cys | Asp Pro 45 Asp Thr | Gly 30 Asn Leu Pro | 15 Trp Gly Val Glu | Lys Val Glu Gly 80 | |
| 173 175 176 177 179 181 183 185 187 191 193 195 197 | <400 Met 1 Ile Ala Met Asp 65 Ile | O> SI Gly Gly Tyr Gln 50 Trp | Asp Asp 35 Met Ile Asp | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe | 2 Ala 5 His Asn Leu Asn Arg 85 | Met Gly Pro Ala Asn 70 Ala | Glu Phe Glu 55 Pro | Ser His 40 Asn Glu Ala | Ser 25 Pro Gln Ala Asn | 10 Pro Thr Leu Ser Phe 90 | Tyr Asp Thr Ile 75 Gln | Phe Asn Ser 60 Cys Asp | Asp Pro 45 Asp Thr | Gly 30 Asn Leu Pro | 15 Trp Gly Val Glu Gly 95 | Lys Val Glu Gly 80 Leu | |
| 173 175 176 177 179 181 183 185 187 191 193 195 197 | <400 Met 1 Ile Ala Met Asp 65 Ile | O> SI Gly Gly Tyr Gln 50 Trp | Asp Asp 35 Met Ile Asp | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe | 2 Ala 5 His Asn Leu Asn Arg 85 | Met Gly Pro Ala Asn 70 Ala | Glu Phe Glu 55 Pro | Ser His 40 Asn Glu Ala | Ser 25 Pro Gln Ala Asn | 10 Pro Thr Leu Ser Phe 90 | Tyr Asp Thr Ile 75 Gln | Phe Asn Ser 60 Cys Asp | Asp Pro 45 Asp Thr | Gly 30 Asn Leu Pro | 15 Trp Gly Val Glu | Lys Val Glu Gly 80 Leu | • |
| 173 175 176 177 179 181 183 185 187 191 193 195 197 | <400 Met 1 Ile Ala Met Asp 65 Ile | O> SI Gly Gly Tyr Gln 50 Trp | Asp Asp 35 Met Ile Asp | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe | 2 Ala 5 His Asn Leu Asn Arg 85 | Met Gly Pro Ala Asn 70 Ala | Glu Phe Glu 55 Pro | Ser His 40 Asn Glu Ala | Ser 25 Pro Gln Ala Asn | 10 Pro Thr Leu Ser Phe 90 | Tyr Asp Thr Ile 75 Gln | Phe Asn Ser 60 Cys Asp | Asp Pro 45 Asp Thr | Gly 30 Asn Leu Pro | 15 Trp Gly Val Glu Gly 95 | Lys Val Glu Gly 80 Leu | , |
| 173 175 176 177 179 181 183 185 187 199 191 193 195 197 199 201 | <400 Met 1 Ile Ala Met Asp 65 Ile Ala | O> SI Gly Gly Tyr Gln 50 Trp Asn | EQUENT Phe Asp 35 Met Ile Asp Phe | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe Arg 100 | 2 Ala 5 His Asn Leu Asn Arg 85 Asn | Met Gly Pro Ala Asn 70 Ala Ala | Glu Phe Glu 55 Pro Ile Val | Ser His 40 Asn Glu Ala Ala | Ser 25 Pro Gln Ala Asn Lys 105 | 10 Pro Thr Leu Ser Phe 90 Phe | Tyr Asp Thr Ile 75 Gln Met | Phe Asn Ser 60 Cys Asp Ala | Asp Pro 45 Asp Thr Tyr | Gly 30 Asn Leu Pro His Thr | 15 Trp Gly Val Glu Gly 95 | Lys Val Glu Gly 80 Leu Gly | , |
| 173 175 176 177 179 181 183 185 187 199 191 193 195 197 199 201 | <400 Met 1 Ile Ala Met Asp 65 Ile Ala | O> SI Gly Gly Tyr Gln 50 Trp Asn | EQUENT Phe Asp 35 Met Ile Asp Phe | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe Arg 100 | 2 Ala 5 His Asn Leu Asn Arg 85 Asn | Met Gly Pro Ala Asn 70 Ala Ala | Glu Phe Glu 55 Pro Ile Val | Ser His 40 Asn Glu Ala Ala | Ser 25 Pro Gln Ala Asn Lys 105 | 10 Pro Thr Leu Ser Phe 90 Phe | Tyr Asp Thr Ile 75 Gln Met | Phe Asn Ser 60 Cys Asp Ala | Asp Pro 45 Asp Thr Tyr | Gly 30 Asn Leu Pro His Thr | 15 Trp Gly Val Glu Gly 95 Arg | Lys Val Glu Gly 80 Leu Gly | , |
| 173 175 176 177 179 181 183 185 187 199 191 193 195 197 199 201 203 205 | <400 Met 1 Ile Ala Met Asp 65 Ile Ala Asn | O> SE Gly Gly Tyr Gln 50 Trp Asn Glu Arg | EQUER Phe Asp 35 Met Ile Asp Phe Ile 115 | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe Arg 100 Thr | Ala 5 His Asn Leu Asn Arg 85 Asn Phe | Met Gly Pro Ala Asn 70 Ala Ala Ala | Glu Phe Glu 55 Pro Ile Val Pro | Ser His 40 Asn Glu Ala Ala Asp 120 | Ser 25 Pro Gln Ala Asn Lys 105 Arg | 10 Pro Thr Leu Ser Phe 90 Phe | Tyr Asp Thr Ile 75 Gln Met Val | Phe Asn Ser 60 Cys Asp Ala Met | Asp Pro 45 Asp Thr Tyr Arg Ser 125 | Gly 30 Asn Leu Pro His Thr 110 Gly | 15 Trp Gly Val Glu Gly 95 Arg | Lys Val Glu Gly 80 Leu Gly | |
| 173 175 176 177 179 181 183 185 187 199 191 193 195 197 199 201 203 205 | <400 Met 1 Ile Ala Met Asp 65 Ile Ala Asn | O> SE Gly Gly Tyr Gln 50 Trp Asn Glu Arg | EQUER Phe Asp 35 Met Ile Asp Phe Ile 115 | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe Arg 100 Thr | Ala 5 His Asn Leu Asn Arg 85 Asn Phe | Met Gly Pro Ala Asn 70 Ala Ala Ala | Glu Phe Glu 55 Pro Ile Val Pro | Ser His 40 Asn Glu Ala Ala Asp 120 | Ser 25 Pro Gln Ala Asn Lys 105 Arg | 10 Pro Thr Leu Ser Phe 90 Phe | Tyr Asp Thr Ile 75 Gln Met Val | Phe Asn Ser 60 Cys Asp Ala Met | Asp Pro 45 Asp Thr Tyr Arg Ser 125 | Gly 30 Asn Leu Pro His Thr 110 Gly | 15 Trp Gly Val Glu Gly 95 Arg Gly | Lys Val Glu Gly 80 Leu Gly | |
| 173 175 176 177 179 181 183 185 187 199 201 203 205 207 209 | <400 Met 1 Ile Ala Met Asp 65 Ile Ala Asn Thr | O> SE Gly Gly Tyr Gln 50 Trp Asn Glu Arg Gly 130 | Asp Asp Asp Met Ile Asp Phe Ile Il5 Ala | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe Arg 100 Thr | Ala 5 His Asn Leu Asn Arg 85 Asn Phe Glu | Met Gly Pro Ala Asn 70 Ala Ala Ala Asp Val | Glu Phe Glu 55 Pro Ile Val Pro Thr 135 | Ser His 40 Asn Glu Ala Ala Asp 120 Ala | Ser 25 Pro Gln Ala Asn Lys 105 Arg | 10 Pro Thr Leu Ser Phe 90 Phe Ile Cys | Tyr Asp Thr Ile 75 Gln Met Val Leu | Phe Asn Ser 60 Cys Asp Ala Met Ala 140 | Asp Pro 45 Asp Thr Tyr Arg Ser 125 Asp | Gly 30 Asn Leu Pro His Thr 110 Gly | 15 Trp Gly Val Glu Gly 95 Arg Gly Gly | Lys Val Glu Gly 80 Leu Gly Ala Glu | |
| 173 175 176 177 181 183 185 187 189 191 193 195 197 201 203 205 207 209 211 | <pre><400 Met 1 Ile Ala Met Asp 65 Ile Ala Asn Thr Ala</pre> | O> SE Gly Gly Tyr Gln 50 Trp Asn Glu Arg Gly 130 | Asp Asp Asp Met Ile Asp Phe Ile Il5 Ala | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe Arg 100 Thr | Ala 5 His Asn Leu Asn Arg 85 Asn Phe Glu | Met Gly Pro Ala Asn 70 Ala Ala Ala Asp Val | Glu Phe Glu 55 Pro Ile Val Pro Thr 135 | Ser His 40 Asn Glu Ala Ala Asp 120 Ala | Ser 25 Pro Gln Ala Asn Lys 105 Arg | 10 Pro Thr Leu Ser Phe 90 Phe Ile Cys | Tyr Asp Thr Ile 75 Gln Met Val Leu | Phe Asn Ser 60 Cys Asp Ala Met Ala 140 | Asp Pro 45 Asp Thr Tyr Arg Ser 125 Asp | Gly 30 Asn Leu Pro His Thr 110 Gly | 15 Trp Gly Val Glu Gly 95 Arg Gly | Lys Val Glu Gly 80 Leu Gly Ala Glu | |
| 173 175 176 177 181 183 185 187 189 191 193 195 197 201 203 205 207 209 211 213 | <pre><400 Met 1 Ile Ala Met Asp 65 Ile Ala Asn Thr Ala 145</pre> | O> SE Gly Gly Tyr Gln 50 Trp Asn Glu Arg Gly 130 Phe | EQUENT Phe Asp 35 Met Ile Asp Phe Ile 115 Ala Leu | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe Arg 100 Thr His | Ala 5 His Asn Leu Asn Arg 85 Asn Phe Glu Pro | Met Gly Pro Ala Asn 70 Ala Ala Ala Ile 150 | Glu Phe Glu 55 Pro Ile Val Pro Thr 135 Pro | Ser His 40 Asn Glu Ala Ala Asp 120 Ala Tyr | Ser 25 Pro Gln Ala Asn Lys 105 Arg Phe | 10 Pro Thr Leu Ser Phe 90 Phe Ile Cys | Tyr Asp Thr Ile 75 Gln Met Val Leu Gly 155 | Phe Asn Ser 60 Cys Asp Ala Met Ala 140 Phe | Asp Product 45 Asp Thr Tyr Arg Ser 125 Asp Asp | Gly 30 Asn Leu Pro His Thr 110 Gly Pro | 15 Trp Gly Val Glu Gly 95 Arg Gly Gly Asp | Lys Val Glu Gly 80 Leu Gly Ala Glu Leu 160 | |
| 173 175 176 177 181 183 185 187 189 191 193 195 197 201 203 205 207 209 211 213 | <pre><400 Met 1 Ile Ala Met Asp 65 Ile Ala Asn Thr Ala 145</pre> | O> SE Gly Gly Tyr Gln 50 Trp Asn Glu Arg Gly 130 Phe | EQUENT Phe Asp 35 Met Ile Asp Phe Ile 115 Ala Leu | ISM: NCE: Lys Gly 20 Gln Gly Leu Phe Arg 100 Thr His | Ala 5 His Asn Leu Asn Arg 85 Asn Phe Glu Pro | Met Gly Pro Ala Asn 70 Ala Ala Ala Ile 150 | Glu Phe Glu 55 Pro Ile Val Pro Thr 135 Pro | Ser His 40 Asn Glu Ala Ala Asp 120 Ala Tyr | Ser 25 Pro Gln Ala Asn Lys 105 Arg Phe | 10 Pro Thr Leu Ser Phe 90 Phe Ile Cys | Tyr Asp Thr Ile 75 Gln Met Val Leu Gly 155 | Phe Asn Ser 60 Cys Asp Ala Met Ala 140 Phe | Asp Product 45 Asp Thr Tyr Arg Ser 125 Asp Asp | Gly 30 Asn Leu Pro His Thr 110 Gly Pro | 15 Trp Gly Val Glu Gly 95 Arg Gly Gly | Lys Val Glu Gly 80 Leu Gly Ala Glu Leu 160 | |

Input Set : A:\Pto.amc

| 219 221 | Asn | Asn | Phe | Val 180 | Leu | Thr | Lys | Glu | Ala 185 | Leu | Glu | Asp | Ala | Tyr 190 | Glu | Lys | |
|------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------|------------|-------|------------------|------------|------------|------------|-------|------|------------|------------|------------|-------|--------|-----|
| | Ala | Arg | Glu 195 | | Asn | Ile | Arg | Val 200 | | Gly | Leu | Leu | Ile 205 | Thr | Asn | Pro | |
| | Ser | Asn 210 | | Leu | Gly | Thr | Ile 215 | | Asp | Arg | Lys | Thr 220 | | Arg | Thr | Val | |
| | Val | | Phe | Ile | Asn | Glu | | Arg | Ile | His | Leu | | Cys | Asp | Glu | Ile | |
| 233 | 225 230 235 240 | | | | | | | | | | | | | | | | |
| | Tyr | Tyr Ala Ala Thr Val Phe Ser Gln Pro Gly Phe Ile Ser Ile Ala Glu 245 250 255 | | | | | | | | | | | | | | | |
| 237 | Tlo | т оп | C1 | X an | | Mbr | 7 0 0 | Tlo | C1.11 | | λαn | λνα | λcn | Lou | | Hic | |
| 239 | TTE | теи | GIU | 260 | GIU | 1111 | ASP | TIE | 265 | Cys | АБР | AIG | ASII | 270 | Val | 1115 | |
| | Tle | Val | Τvr | | Leu | Ser | Lvs | Asp | | Glv | Phe | Pro | Glv | | Arg | Val | |
| 245 | | | 275 | 501 | | | -1- | 280 | | 1 | | | 285 | | 3 | | |
| 247 | Gly | Ile | Ile | Tyr | Ser | Tyr | Asn | Asp | Ala | Val | Val | Asn | Cys | Ala | Arg | Lys | |
| 249 | | 290 | | | | | 295 | | | | | . 300 | | | | | |
| 251 | Met | Ser | Ser | Phe | Gly | | Val | Ser | Thr | Gln | | Gln | Tyr | Leu | Leu | | |
| | 305 | | | | | 310 | _ | | _ | | 315 | | _ | | | 320 | |
| | Ser | | Leu | Asn | _ | Asp | Glu | Phe | Val | | Arg | Phe | Leu | Ala | Glu | Ser | |
| 257 | 3 1 - | · T | 3 | T | 325 | C1 m | A | Dha | λ ~~ « | 330 | Dho | mb × | C1,, | C1,, | 335 | מומ | |
| 261 | Ala | ьys | Arg | 1.eu | Ата | GIN | Arg | Pne | 345 | val | Pne | THE | GTĀ | 350 | Leu | Ala | |
| | Tave | Val | Glv | | T.v.c | Cvs | Len | Gln | | Asn | Ala | Glv | Leu | | Val | Ψгр | |
| 265 | БуЗ | vai | 355 | 110 | ביים | O ₁ D | 1J¢ u | 360 | 001 | 11011 | | 011 | 365 | | | | |
| | Met | Asp | | Arg | Gln | Leu | Leu | | Lys | Pro | Thr | Phe | Asp | Ser | Glu | Thr | |
| 269 | | 370 | | _ | | | 375 | - | _ | | | 380 | _ | | | | |
| 271 | Glu | Leu | Trp | Lys | Val | Ile | Ile | His | Glu | Val | Lys | Ile | Asn | Val | Ser | Pro | |
| 273 | 385 | | | | | 390 | | | | | 395 | | | | | 400 | |
| | Gly | Tyr | Ser | Phe | | Cys | Thr | Glu | Pro | | Trp | Phe | Arg | Val | Cys | Tyr | |
| 277 | | _ | | _ | 405 | | | ** - 1 | ~ 1 | 410 | | * | 01 | 3 | 415 | 3 | |
| | Ala | Asn | Met | 420 | Asp | мет | Ата | vaı | 425 | ile | Ala | ьeu | GIN | 430 | Ile | Arg | |
| 281 | Acn | Dhe | Val | | Gln | λen | Luc | Glu | | Val | Val | Ser | Δsn | | Lys | His | |
| 285 | N S II | rne | 435 | Бец | GIII | ASII | цуз | 440 | val | Val | va. | UCI | 445 | בענב | Lys | 1115 | |
| | Cvs | Trp | | Ser | Asn | Leu | Arg | | Ser | Leu | Lvs | Thr | | Arq | Phe | Asp | |
| 289 | -1- | 450 | | | | | 455 | | | | | 460 | , | _ | | - | |
| 291 | Asp | Ile | Thr | Met | Ser | Pro | His | Ser | Pro | Leu | Pro | Gln | Ser | Pro | Met | Val | |
| 293 | 465 | | | | | 470 | | | | | 475 | | | | | 480 | |
| | - | Ala | | | | | | | | | | | | | | | |
| | | 0> SI | _ | | | | | | | | | | | | | | |
| | | 1> LI | | | 174 | | | | | | | | | | | | |
| | | 2> T | | | | | | | | | | | | | | | |
| | | 3> OI | | | | nt | | | | | | | | | | | |
| | <pre><400> SEQUENCE: 3 ttacagatac acagaatcag acgacacatc tactttaata acagaaaaat aataagtgtc 60</pre> | | | | | | | | | | | | | 60 | | | |
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| | | | | | | | | | | | | | | | | tgaatc | |
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| | | | | | | | | | | | | | | | | atcgga | |
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Input Set : A:\Pto.amc

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VERIFICATION SUMMARY

DATE: 08/29/2001

PATENT APPLICATION: US/09/763,957

TIME: 13:06:55

Input Set : A:\Pto.amc

Output Set: N:\CRF3\08292001\I763957.raw

 $\hbox{L:9 M:270 C: Current Application Number differs, Replaced Application Number L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date}$